## What is claimed is:

## 1. This invention relates to compounds comprising Formula I:

 $R^2$  N  $R^4$ 

## Formula I

wherein:

R<sup>1</sup> is (C<sub>1-6</sub>)alkyl;

10 R<sup>2</sup> is halogen or -OR';

R<sup>3</sup> is hydrogen or -OR';

R' is hydrogen, (C<sub>1-6</sub>)alkyl, or SO<sub>2</sub>R";

R" is (C<sub>1-6</sub>)alkyl, haloalkyl,

aryl or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with a group selected from  $(C_{1-6})$ alkyl, halo, haloalkyl, cyano, nitro, alkylsulfonyl, and alkylsulfonylamino;

 $R^4$  is (i) ( $C_{1-6}$ )alkyl, (ii) aryl, heterocyclyl, or heteroaryl, wherein said aryl, heterocyclyl or heteroaryl groups are optionally substituted with a group selected from ( $C_{1-6}$ )alkyl, halo, haloalkyl, ( $C_{1-6}$ )alkoxy, cyano, amino, mono- or di alkylamino, nitro, alkylsulfonyl, alkylcarbonyl, urea, alkylcarbonylamino, alkylsulfonylamino, alkylaminosulfonyl, alkoxycarbonyl, heterocyclyl and heteroaryl, or

(iii) -NR<sup>5</sup>R<sup>6</sup>; and

R<sup>5</sup> and R<sup>6</sup> are independently of each other hydrogen, (C<sub>1-6</sub>)alkyl,

aryl or heterocyclyl; wherein said aryl or heterocyclyl groups are optionally substituted with  $(C_{1-6})$ alkyl, halo, haloalkyl, cyano,  $(C_{1-6})$ alkoxy, and alkylsulfonyl;

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or an individual isomer, a racemic or non-racemic mixture of isomers, or an acceptable salt or solvate thereof.

- 2. The compound of Claim 1, wherein  $R^2$  is  $(C_{1-6})$ alkoxy and  $R^3$  is hydrogen.
- 3. The compound of Claim 1, wherein  $R^2$  is  $(C_{1-6})$  alkoxy and  $R^3$  is  $(C_{1-6})$  alkoxy.
- 4. The compound of Claim 1, wherein R<sup>2</sup> is -OSO<sub>2</sub>R" and R<sup>3</sup> is hydrogen.
- 10 5. The compound of Claim 1, wherein R<sup>2</sup> is hydroxy and R<sup>3</sup> is hydrogen.
  - 6. The compound of Claim 1, wherein R<sup>2</sup> is halogen and R<sup>3</sup> is hydrogen.
  - 7. The compound of Claim 1 wherein  $R^4$  is  $(C_{1-6})$ alkyl.

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- 8. The compound of Claim 7, wherein R<sup>1</sup> is ethyl or propyl.
- 9. The compound of Claim 8, wherein R<sup>2</sup> is -OR', and R<sup>3</sup> is -OR' or hydrogen.
- 20 10. The compound of Claim 1, wherein R<sup>4</sup> is an aryl group.
  - 11. The compound of Claim 10, wherein R<sup>4</sup> is phenyl optionally substituted with a group selected from (C<sub>1-6</sub>)alkyl, halo, haloalkyl, (C<sub>1-6</sub>)alkoxy, cyano, amino, monoor di alkylamino, nitro, alkylsulfonyl, alkylcarbonyl, urea, alkylcarbonylamino, alkylsulfonylamino, alkylaminosulfonyl, alkoxycarbonyl, heterocyclyl and heteroaryl.
  - 12. The compound of Claim 10, wherein R<sup>1</sup> is ethyl or propyl.
- 30 13. The compound of Claim 11, wherein R<sup>1</sup> is ethyl or propyl.

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- 14. The compound of Claim 13, wherein R<sup>2</sup> is -OR', and R<sup>3</sup> is -OR' or hydrogen.
- 15. The compound of Claim 1, wherein R<sup>4</sup> is a heteroaryl group.
- 5 16. The compound of Claim 15, wherein R<sup>4</sup> is selected from furanyl, thiophenyl, isooxazolyl, oxazolyl, imidazolyl, and pyrazolyl, all optionally substituted with one or two (C<sub>1-6</sub>) alkyl.
  - 17. The compound of Claim 15, wherein R<sup>1</sup> is ethyl or propyl.

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18. The compound of Claim 16, wherein R<sup>1</sup> is ethyl or propyl.

- 19. The compound of Claim 18, wherein R<sup>2</sup> is -OR', and R<sup>3</sup> is -OR' or hydrogen.
- 15 20. The compound of Claim 1, wherein R<sup>4</sup> is a heterocyclyl group.
  - 21. The compound of Claim 20, wherein R<sup>4</sup> is piperidinyl, pyrrolidinyl, morpholinyl, piperazinyl, or diazepanyl, all optionally substituted with one or two (C<sub>1-6</sub>)alkyl or alkylcarbonyl groups.
  - 22. The compound of Claim 20, wherein  $R^4$  is piperidin-4-yl, optionally substituted with one or two ( $C_{1-6}$ )alkyl groups or alkylcarbonyl groups.
- 23. The compound of Claim 20, wherein R<sup>4</sup> is piperidin-1-yl, optionally substituted with one or two (C<sub>1-6</sub>)alkyl groups.
  - 24. The compound of Claim 20, wherein  $R^4$  is pyrrolidin-1-yl, optionally substituted with one or two ( $C_{1-6}$ )alkyl groups.
- 30 25. The compound of Claim 20, wherein  $R^4$  is [1,4]-diazepany-1-yl, optionally substituted with one or two ( $C_{1-6}$ )alkyl groups.

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- 26. The compound of Claim 20, wherein  $R^4$  is piperazin-1-yl, optionally substituted with one or two ( $C_{1-6}$ )alkyl groups.
- 5 27. The compound of Claim 20, wherein R<sup>4</sup> is morpholinyl, optionally substituted with one or two (C<sub>1-6</sub>)alkyl groups.
  - 28. The compound of Claim 20, wherein R<sup>1</sup> is ethyl or propyl.
- 10 29. The compound of Claim 21, wherein R<sup>1</sup> is ethyl or propyl.
  - 30. The compound of Claim 29, wherein R<sup>2</sup> is -OR', and R<sup>3</sup> is -OR' or hydrogen.
  - 31. The compound of Claim 1, wherein R<sup>4</sup> is -NR<sup>5</sup>R<sup>6</sup>.

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- 32. The compound of Claim 31, wherein  $R^5$  is  $(C_{1-6})$ alkyl, and  $R^6$  is hydrogen or  $(C_{1-6})$ alkyl.
- 33. The compound of Claim 31, wherein R<sup>1</sup> is ethyl or propyl.
- 34. The compound of Claim 33, wherein R<sup>2</sup> is -OR', and R<sup>3</sup> is -OR' or hydrogen.
- 35. The compound of Claim 1, comprising:
- {4-[(7-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-piperazin-1-yl-methanone;
  - {4-[(7-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-morpholin-4-yl-methanone;
  - {4-[(6,7-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-piperidin-4-yl-methanone;
- 30 {4-[((R)-7-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-piperidin-4-yl-methanone;

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- 1-{4-[(7-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-ethanone;
- {4-[(6,7-dimethoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-piperazin-1-yl-methanone;
- 5 {4-[(7-methoxy-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}- (4-methyl-piperazin-1-yl)-methanone; and
  - {4-[(7-Bromo-1,2,3,4-tetrahydro-naphthalen-2-yl)-propyl-amino]-piperidin-1-yl}-piperidin-4-yl-methanone.
- 10 36. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 in admixture with an acceptable carrier.
  - 37. The pharmaceutical composition of Claim 36, wherein the compound is suitable for administration to a subject having a disease state which is alleviated by treatment with a M2/M3 muscarinic receptor antagonist.

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- 38. A method of treating a subject which comprises administering to the subject with a disease treatable with a M2/M3 muscarinic antagonist a therapeutically effective amount of one or more compounds of Claim 1.
- 39. The method of Claim 38, wherein the disease state is associated with smooth muscle disorders comprising diseases of the genitourinary or gastrointestinal tract, or of respiratory states.
- 25 40. The method of Claim 39, wherein the disease state is associated with the genitourinary tract.
  - 41. The method of Claim 40, wherein the disease state comprises overactive bladder, detrusor hyperactivity, urgency, frequency, reduced bladder capacity, incontinence episodes, changes in bladder capacity, micturition threshold,

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unstable bladder contractions, sphincteric spasticity, outlet obstruction, outlet insufficiency, pelvic hypersensitivity, idiopathy conditions, or detursor instability.

- The method of treatment of Claim 39, wherein the disease state comprises
   respiratory states.
  - 43. The method of treatment of Claim 42, wherein the disease state comprises respiratory states from allergies or asthma.
- 10 44. The method of treatment of Claim 39, wherein the disease state comprises gastrointestinal tract disorders.
  - 45. A process for preparing a compound as claimed in Claim 1 which process comprises reacting a compound having a general formula **d**:

$$R^2$$
 $R^3$ 
 $d$ 
 $NH$ 

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wherein R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are as described in Claim 1,

with a compound of general Formula R<sup>4</sup>C(O)L, wherein L is a leaving group and R<sup>4</sup> is as described in Claim 1,

to prepare a compound of Formula I

$$R^2$$
 $R^3$ 
 $R^4$ 
 $R^4$ 

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wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are as described in Claim 1.